

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-20 (Cancelled).

21. (New) A transgenic plant cell transformed with a nucleic acid, wherein the nucleic acid comprises a polynucleotide selected from the group consisting of:

- a) a polynucleotide as defined in SEQ ID NO:6;
- b) a polynucleotide encoding a polypeptide of SEQ ID NO:11;
- c) a polynucleotide having at least 95% sequence identity to SEQ ID NO:6; and
- d) a polynucleotide encoding a polypeptide having at least 95% sequence identity to SEQ ID NO:11.

22. (New) The plant cell of claim 21, wherein the nucleic acid comprises a polynucleotide having at least 95% sequence identity to SEQ ID NO:6.

23. (New) The plant cell of claim 21, wherein the nucleic acid comprises a polynucleotide encoding a polypeptide having at least 95% sequence identity to SEQ ID NO:11.

24. (New) A transgenic plant comprising the plant cell of claim 21.

25. (New) The plant of claim 24, wherein the plant is a monocot.

26. (New) The plant of claim 24, wherein the plant is a dicot.

27. (New) The plant of claim 24, wherein the plant is selected from the group consisting of maize, wheat, rye, oat, triticale, rice, barley, soybean, peanut, cotton, rapeseed, canola, manihot, pepper, sunflower, tagetes, solanaceous plants, potato, tobacco, eggplant, tomato, Vicia species, pea, alfalfa, coffee, cacao, tea, Salix species, oil palm, coconut, perennial grass and a forage crop plant.

28. (New) A seed comprising the transgenic plant of claim 24, wherein the seed comprises the nucleic acid.

29. (New) A transgenic plant cell transformed with a nucleic acid, wherein the nucleic acid comprises a polynucleotide selected from the group consisting of:

- a) a polynucleotide having at least 90% sequence identity to SEQ ID NO:6; and
- b) a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11,

and wherein the nucleic acid encodes a polypeptide that functions to increase the plant cell's tolerance to an environmental stress selected from the group consisting of drought and low temperature as compared to a wild type variety of the plant cell.

30. (New) The plant cell of claim 29, wherein the nucleic acid comprises a polynucleotide having at least 90% sequence identity to SEQ ID NO:6.

31. (New) The plant cell of claim 29, wherein the nucleic acid comprises a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11.

32. (New) A transgenic plant comprising the transgenic plant cell of claim 29.

33. (New) The plant of claim 32, wherein the plant is a monocot.

34. (New) The plant of claim 32, wherein the plant is a dicot.

35. (New) The plant of claim 32, wherein the plant is selected from the group consisting of maize, wheat, rye, oat, triticale, rice, barley, soybean, peanut, cotton, rapeseed, canola, manihot, pepper, sunflower, tagetes, solanaceous plants, potato, tobacco, eggplant, tomato, Vicia species, pea, alfalfa, coffee, cacao, tea, Salix species, oil palm, coconut, perennial grass and a forage crop plant.

36. (New) A seed comprising the plant of claim 32, wherein the seed comprises the nucleic acid, and wherein the seed is true breeding for an increased tolerance to an environmental stress as compared to a wild type variety of the seed, and wherein the environmental stress is selected from the group consisting of drought and low temperature.

37. (New) An isolated nucleic acid, wherein the nucleic acid comprises a polynucleotide selected from the group consisting of:

- a) a polynucleotide as defined in SEQ ID NO:6;
- b) a polynucleotide encoding a polypeptide of SEQ ID NO:11;
- c) a polynucleotide having at least 95% sequence identity to SEQ ID NO:6; and

- d) a polynucleotide encoding a polypeptide having at least 95% sequence identity to SEQ ID NO:11.

38. (New) The nucleic acid of claim 37, wherein the nucleic acid comprises a polynucleotide having at least 95% sequence identity to SEQ ID NO:6.

39. (New) The nucleic acid of claim 37, wherein the nucleic acid comprises a polynucleotide encoding a polypeptide having at least 95% sequence identity to SEQ ID NO:11.

40. (New) An isolated nucleic acid, wherein the nucleic acid comprises a polynucleotide selected from the group consisting of:

- a) a polynucleotide having at least 90% sequence identity to SEQ ID NO:6; and
- b) a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11,

and wherein the nucleic acid encodes a polypeptide that functions to increase a plant cell's tolerance to an environmental stress selected from the group consisting of drought and low temperature as compared to a wild type variety of the plant cell.

41. (New) The nucleic acid of claim 40, wherein the nucleic acid comprises a polynucleotide having at least 90% sequence identity to SEQ ID NO:6.

42. (New) The nucleic acid of claim 40, wherein the nucleic acid comprises a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11.

43. (New) A method of producing a transgenic plant comprising a nucleic acid encoding a polypeptide, wherein expression of the polypeptide in the plant results in the plant's increased tolerance to an environmental stress as compared to a wild type variety of the plant, comprising,

- a) transforming a plant cell with an expression vector comprising the nucleic acid; and
- b) generating from the plant cell a transgenic plant that expresses the polypeptide,

and wherein the nucleic acid comprises a polynucleotide selected from the group consisting of:

- a) a polynucleotide as defined in SEQ ID NO:6;
- b) a polynucleotide encoding a polypeptide of SEQ ID NO:11,
- c) a polynucleotide having at least 90% sequence identity to SEQ ID NO:6; and

- d) a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11,

and wherein the environmental stress is selected from the group consisting of drought and low temperature.

44. (New) The method of claim 43, wherein the nucleic acid comprises a polynucleotide of SEQ ID NO:6.

45. (New) The method of claim 43, wherein the nucleic acid comprise a polynucleotide encoding a polypeptide of SEQ ID NO:11.

46. (New) The method of claim 43, wherein the nucleic acid comprises a polynucleotide having at least 90% sequence identity to SEQ ID NO:6.

47. (New) The method of claim 43, wherein the nucleic acid comprises a polynucleotide encoding a polypeptide having at least 90% sequence identity to SEQ ID NO:11.